

VI. TRANSPORTATION

Introduction

Area residents are very concerned about traffic volume and safety along the pike, and these issues provided a major incentive for this study.

Tremendous residential and industrial growth in Carroll County and southern Pennsylvania is increasing the traffic through this prime agricultural community. Residents believe that high traffic volumes, poor sight distances, poor vertical alignment, and intersections without signals are causing serious safety problems.

During the study process, the community called for reducing single-occupant automobile commuting. Alternatives could include mass transit buses, light or commuter rail, and more carpooling. Also, area residents asked for weight limits on Hanover Pike to decrease truck traffic.

Retaining the agricultural integrity of the area, as advocated in Baltimore County Master Plan 1989-2000, while realistically providing for transportation demands is a major issue.

(a) Description of the Existing Transportation System

The transportation component of the Hanover Pike corridor study has three elements: (1) travel demand and safety, which are represented by traffic volume and accidents; (2) infrastructure, or the physical elements of the transportation system such as roads, the Metro, traffic signals, and railroads; and (3) services, such as the State's Mass Transit Administration (MTA) or private sector bus

service, commuter rail, resident or employer-sponsored paratransit service.

Travel Demand

From 1975 to 1989, traffic on Hanover Pike north of Butler Road increased 51 percent, from 8,900 vehicles a day to 13,400. Although the volume remains lower, traffic on Hanover Pike north of Glen Falls Road increased 95 percent, from 5,900 vehicles a day in 1975 to 11,500 in 1989. On the northern most segment of Hanover Pike within the study area, traffic has increased 106 percent, 6,600 vehicles a day; from 6,200 in 1975 to 12,800 in 1989.

Similar traffic growth occurred along Westminster Pike and Butler Road. In 1975, about 12,400 vehicles a day used Westminster Pike, west of the Carroll County Line. By 1989, the daily traffic increased to approximately 26,000 vehicles. About a half-mile east of this segment, near Nob Hill, about 30,000 vehicles a day use Westminster Pike. Traffic on Butler Road east of Hanover Pike has grown from 8,950 in 1975 to 15,200 in 1989.

MDOT has made traffic projections for the Hanover Pike assuming that recent trends in volume will continue. Under these assumptions, the portion of Hanover Pike between Butler Road and Glen Falls Road is likely to carry 25,500 vehicles daily by 2015. The section of

Hanover Pike between Glen Falls Road and Emory Road could average about 22,000 vehicles daily by 2015. North of Emory Road, Hanover Pike is projected to carry more than 24,000 vehicles daily by 2015.

Hanover Pike's configuration can accommo-

date about 20,000 vehicles a day before being classified as congested. These projections indicate that some capacity improvements should be made to the Hanover Pike corridor before 2015.

Future traffic volume along Westminster Pike may dictate that capacity improvements be made shortly after the turn of the century. If traffic volumes along Westminster Pike continue to increase by 4 percent a year, more than 55,000 vehicles will be using Westminster Pike daily by 2005. This level of traffic on Westminster Pike would definitely require capacity improvements.

But future demand upon Butler Road is, perhaps, a more immediate concern. Since 1975, average daily traffic along Butler Road east of Hanover Pike has increased by 4.3 percent a year. If this rate continues, Butler Road will be carrying approximately 30,000 vehicles a day by 2005, which exceeds the road's capacity.

Safety

The MDOT's Accident Data File from 1985 to 1989 was used to compile the accident statistics used in this study.

The state's file contains all accidents where Baltimore County or Maryland State Police officers filed reports or issued citations for moving violations. Therefore, this data may understate the number of accidents because it would not include accidents where the drivers were able to reach a settlement without police involvement or minor "fender-benders" where no citations for moving violations were issued.

The roads within the study area were broken

into half-mile segments, and the number of accidents occurring within each segment was totalled. Additionally, this study includes the number of fatal accidents and accidents involving trucks.

More accidents occurred on the Westminster Pike than any other highway within the study area. Although the portion of the Westminster Pike within the study area is only 2.5 miles long, 196 accidents happened along this stretch between 1985 and 1989.

About a third of these accidents, 62, involved trucks, and two fatalities, one in 1985 and another in 1988, were reported. Westminster Pike's half-mile section with the highest number of accidents lies between Hanover Pike and just west of the Northwest Expressway. Approximately 35 percent of this highway's accidents, 68, occurred on this section, and nearly 40 percent of the accidents involving trucks occurred here. But no fatalities occurred in this portion.

The half-mile segment of Westminster Pike with the least number of accidents, 20, runs from Gores Mill Road to just east of Glen Falls Road.

Hanover Pike's 7.2-mile stretch in the study area had the second highest number of accidents, 195, but there were 10 fatalities. Nearly 40 percent the accidents, 73, involved trucks. The percentage of accidents involving trucks on Hanover Pike ranged from 29 percent in 1987 to 50 percent in 1988. The fatalities during the five years ranged from none in 1988 to five in 1989. There were two fatalities each in 1986 and 1987, and one in 1985.

The half-mile section of Hanover Pike that

recorded the highest number of accidents is between Hanover Pike and Butler Road, but no fatalities occurred here. Approximately 25 percent, 48, on Hanover Pike happened on this section. Also, more than 23 percent of the accidents involving trucks occurred here. Interestingly, this section carries the least amount of traffic. A close examination reveals that more than 50 percent of these accidents occurred because of driveway and intersection conflicts. This sub-set of accidents is listed below.

YR	Accident			Totals
	at the Intersection	Related	Driveway Access	
85	3	0	3	6
86	2	0	3	5
87	2	1	0	3
88	6	1	0	7
89	4	0	1	5
	17	2	7	26

The half-mile segment of the Hanover Pike with the least number of accidents is the section south of Arcadia Avenue to Lees Mill Road. Only three accidents occurred here from 1986 to 1989.

With far fewer accidents than Hanover and Westminster pikes, Butler Road recorded the third highest number, 24, along the half-mile stretch in the study area. No fatalities were recorded on this section from 1985 to 1989. The accident data is presented in Exhibit five.

Streets and Roads

In the Hanover Pike corridor, as in most other areas, the road and street network is the transportation system's primary feature. This network is not extensive which befits the rural nature of this area.

The major roads are Hanover Pike (MD 30), which traverses the central portion of the study area from north to south; Emory Road (MD 91) and Westminster Pike on the west; and Butler Road (MD 128) and the Northwest Expressway on the south.

Under Federal classification, each of these roads is a minor arterial on the rural highway system. Dover and Trenton roads are minor collectors. As part of the federal-aid systems, the above roads are the only ones in the study area eligible for federal assistance for construction or maintenance.

Besides being categorized as part of the federal-aid system, roads are also categorized as state roads or local roads and by the type of traffic service they provide. Approximately 40 roads, totalling nearly 30 miles, are classified as local roads, and five roads, about 12 miles, are classified as state roads.

A quarter-mile segment of Amy Brent Service Road is the widest of the local roads with a 36-foot width, and a 1.4-mile segment of Osborne Road is the narrowest local road with one lane on a 10-foot wide paved section. The widest section of state road is a 70-foot section of Westminster Pike, a half-mile north of the Northwest Expressway. The narrowest state road is the 1.5-mile portion of Emory Road, which has a paved width of only 15 feet.

Metro

Although it lies five miles south of the study area, the Baltimore Metro has generated additional commuter traffic along Hanover Pike to the Owings Mills Metro Station. There are no plans to expand the metro northward from its Owings Mills terminus.

Park and Ride

Although no designated Park and Ride lots lie within the study area, a lot east of Hanover Pike just south of the MTA bus loop is used for this purpose. About 20 cars are parked there daily.

The nearest designated Park and Ride lot is in Glyndon. With 40 spaces, it is adjacent to the study area south of Butler Road off Sacred Heart Lane.

Traffic Signals

There are three signalized intersections within the study area -- one at Westminster Pike and the Northwest Expressway, another about a half-mile east, at the intersection of the Northwest Expressway, Hanover Pike, and Butler Road, and the third is at the northern end of the study area at Hanover Pike and Emory Road. The Westminster Pike and Butler Road traffic signals both provide "B" levels-of-service during peak periods. The intersection at Emory Road and Hanover Pike is an "A" intersection.

MTA Bus Service

MTA provides bus service to the southern portion of the study area with the M16 and number 7 bus lines. The M16 service starts at the MTA bus loop on Hanover Pike just south of Old Hanover Road and ends at the Owings Mills Metro Station providing the area's with access to the Baltimore Metro. The trip takes approximately twenty minutes.

Other Service Providers

Although no private-sector bus services, commuter rail, or paratransit services are available within the study area, Rohrbaugh's

Charter Service, Inc. provides daily service from the area's southern boundary--Nob Hill on Westminster Pike--to Baltimore's CBD.

This 50-minute trip begins at the Manchester Park and Ride lot in Carroll County and terminates at the Hyatt Regency in Baltimore. The bus arrives at Nob Hill at 6:52 a.m. and 5:55 p.m. daily. The fare is \$3.00 one way or \$27 for a ten-trip ticket.

(b) Transportation Proposals

Planned Improvements

Any planned or programmed transportation improvements are contained in the Baltimore County Master Plan, the County's Capital Budget, MDOT's Consolidated Transportation Program (CTP), or a component of the CTP called the Special Projects Program. Potential projects that are much more long-ranged are contained in MDOT's Highway Needs Inventory.

According to a review of these documents, the only active project within the study area is a \$47,000 special project changing the caution signal at Hanover Pike and Emory Road to a fully signalized intersection.

Two other projects fall just outside of the study area. A resurfacing project was recently completed on Black Rock Road (MD 88) which lies north of the study area. This special project cost nearly \$2 million. The second project, a capital budget item, lies south of the study area. Glyndon Drive Extended is programmed for construction in FY 1995 and will connect the existing Glyndon Drive with Butler and Worthington Roads.

The Highway Needs Inventory identifies two potential projects for the the study area: constructing Hanover Pike relocated and reconstructing Westminster Pike. The inventory is not a construction commitment, but it signals MDOT's intent to study the need and feasibility of these projects.

Alternatives for Hanover Pike

Six options, primarily alignment alternatives, for improving Hanover Pike were offered for the community's comment. All of the options call for widening the pike to four lanes with a median strip and connecting the pike to the Northwest Expressway.

Option 1

Rebuild Hanover Pike along the existing alignment. Issues to be considered under this proposal include:

- ☐ Fronts of properties will be taken.
- ☐ Driveways will continue to enter the highway unless numerous frontage roads are built.
- ☐ This option has fewer environmental impacts than a more western alignment.
- ☐ Existing vertical alignment problems will be reduced.
- ☐ Farm equipment, by using frontage roads, would have easier access to fields.

Option 2

This option is identical to Option 1 except that it provides westerly bypasses around Fowblesburg and Woodensburg. In addition to the issues identified above, this alternative will minimize impacts on Fowblesburg and Woodensburg but stream crossings required by this option will cause environmental damage.

Option 3

Build a roadway east of the existing alignment that roughly parallels the CSX rail line. This alternative would begin at the Northwest Expressway and follow the existing alignment to Woodensburg. From the Woodensburg area, the road would swing east along the rail line and move back to the existing alignment near Arcadia. The following issues were identified.

- ☐ By following a ridge line, this is the most environmentally sound option.
- ☐ The new roadway would probably significantly conflict with farming operations.
- ☐ The design could require the least number of rail crossings.
- ☐ While providing the greatest reduction in traffic for the existing communities, this option would reroute traffic to a rural area.

Option 4

Build a western alignment that would nearly bypass the Hanover Pike area. This option would start at the Northwest Expressway, turn west along Westminster Pike and run through Carroll County to Emory Road. The road then would run north along Emory Road until reaching Fowblesburg, which it would bypass. North of Fowblesburg, this option would follow the existing alignment. Some of the issues associated with this option are listed below.

- ☐ This option has the most citizen support.
- ☐ The new road would divert much of the corridor traffic that is currently using the existing roadway.
- ☐ Carroll County has indicated that this is an option they are unlikely to support.
- ☐ The interjurisdictional planning required for this option would tremendously lengthen the planning process.

☐ Unless the County takes ownership of the existing Hanover Pike, there are no incentives or disincentives that could be used to encourage use of this alignment.

☐ Besides numerous stream crossings, this alternative would require construction over a reservoir and is the least environmentally sound proposal.

Option 5

Option five is a set of short-term recommendations that attempt to address certain safety issues along Hanover Pike (i.e. additional traffic signals, re-alignment of roads entering the pike that cause site distance problems).

Option 6

This is MDOT's traditional option for rebuilding Hanover Pike starting north of the Northwest Expressway and west of the pike running parallel to existing alignment until crossing the Carroll County line. MDOT estimates that this alternative would cost more than \$50 million. The more relevant issues of this alignment are:

☐ The new road would virtually bisect the Old Montrose School property.

☐ More residents would oppose this option than any other.

☐ This option is likely to cross more streams than the other alternatives.

☐ It would eliminate traffic conflict with the villages along Hanover Pike.

Hanover Pike Relocated

While the qualitative assessment (See Appendix B) recommends that options 1 and 5 be eliminated from further consideration, each of the remaining alignments faces a unique set of obstacles but warrant further analysis.

Option 2, reconstructing Hanover Pike along its existing alignment except for bypassing the villages, would still allow for driveway access to uses located along the right-of-way and would create major environmental problems at every stream crossing.

Option 3, roughly paralleling the eastern side of the CSX rail line has virtually no citizen support, and it would impact agricultural operations. Practically, this option would cause the least amount of environmental damage. For obvious reasons, Option 4 is the alignment most preferred by Hanover Pike area residents, but this option poses environmental problems at all stream crossings. Also, Carroll County would not support this location.

Instead of identifying a preferred alternative that Baltimore County can support, this study suggests three potential corridors for detailed study by MDOT. Any change in environmental regulations would likely have a major impact on the decision-making process in this corridor.

Whatever option is chosen, serious consideration should be given to reconstructing Hanover Pike as a rural parkway designed to compliment the area's rural character and reduce excessive speeds.

On the long stretches of Hanover Pike outside the three villages, the road should have two, 12-foot lanes each way with a 20-foot landscaped median and a 10-foot shoulder on each side. The median should have well-spaced trees, shrubbery, and wildflowers.

As the road enters the villages, design options should include omitting the median and reducing the lane widths to 11 feet and shoulder widths to five feet.











HANOVER PIKE CORRIDOR STUDY TRANSPORTATION

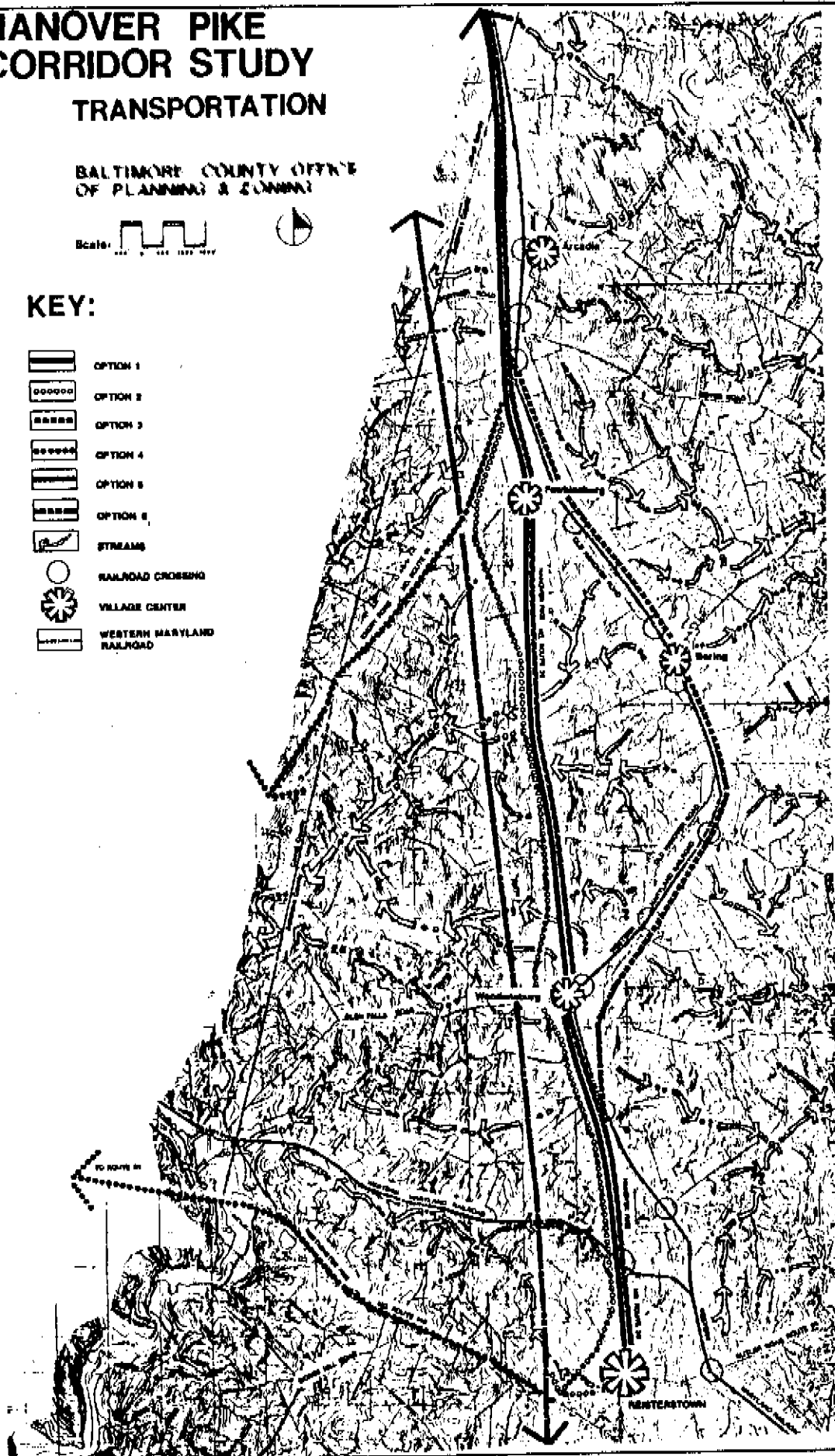
BALTIMORE COUNTY OFFICE
OF PLANNING & ZONING

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KEY:

-  OPTION 1
-  OPTION 2
-  OPTION 3
-  OPTION 4
-  OPTION 5
-  OPTION 6
-  STREAMS
-  RAILROAD CROSSING
-  VILLAGE CENTER
-  WESTERN MARYLAND RAILROAD



(c) Short-term Improvements

Hanover Pike

The offset intersection of Glen Falls and Old Hanover roads at Hanover Pike in Woodensburg should be realigned to correct a significant safety hazard. MDOT should consider placing a traffic signal at this intersection when warranted.

Because Arcadia Volunteer Fire Company's primary access onto Hanover Pike is by Arcadia Road, a warning signal is needed at this intersection.

At the northern end of Fowblesburg, Old Hanover Road intersects Hanover Pike at an awkward angle creating a traffic hazard. The County and MDOT should survey this intersection and consider making Old Hanover Road a cul-de-sac at its northern terminus, making the road one way north, and improving its access onto Hanover Pike.

Butler Road

If traffic volume continues its recent rate of increase, this road will need some capacity enhancements by the turn of the century. To date no capacity improvements are proposed. Butler Road has been proposed for inclusion in the State Highway Needs Inventory so that the appropriate studies can be made for planning the necessary capacity improvements.

Westminster Pike

Traffic volumes will continue to increase along this corridor, and accessing this highway is nerve wracking especially at Nob Hill Road. A traffic signal at Nob Hill Road has been discouraged because of poor sight

distance and the over vertical approach. MDOT has installed signs warning motorists of entering traffic, but this is only a stopgap measure. The County and MDOT should study an alternative solution, such as a parallel service road connecting Nob Hill to Amy Brent Road.

Park and Ride

Establishing a formal park and ride lot at the M16 bus loop should be studied. About 20 cars are parked there daily, but it is not known if these people are riding the bus, carpooling, or working in the area. A windshield survey would determine if the parkers are bus patrons, and if so, then the lot should be paved and striped by the MTA.

Transit/Commuter Bus

Given the corridor's rural character, a fair amount of transit service is provided by the MTA. The Rohrbaugh Commuter Bus Service provides another commuter option for people who live in or drive through this community. At the public meetings, some residents suggested that these types of services be initiated -- an indication that many area residents are unaware of these services.

The County should consider working with the MTA and Rohrbaugh's to develop a marketing program to make area residents and other commuters more aware of the existing transit services. If these services were aggressively marketed and used by more people, the need for highway improvements would be reduced.